

REMARKS/ARGUMENTS

Pending claims 1-2, 7-12, 16-27 and 29 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent Application Publication No. 2002/0059434 (Karaoguz) in view of U.S. Patent No. 6,603,915 (Glebov). Applicant respectfully traverses the rejection.

As to claim 1, there is no teaching or suggestion in any of the cited references of a single integrated circuit that includes both analog and digital portions, and particularly nowhere do the cited references teach or suggest such an integrated circuit including the claimed subject matter of claim 1. In this regard, the Final Office Action contends that "it would have been obvious for a person skilled in the art, when building Karaoguz et al. invention, to integrate said analog portion and said digital portion on one substrate, as taught by Glebov et al. or MCM technology..." Final Office Action, p. 4. However, this contention misses the claimed subject matter, as the Final Office Action concedes that Glebov is only directed to mounting of multiple integrated circuits on a single substrate. *Id.* That is, claim 1 recites a single integrated circuit including analog and digital portions, not multiple integrated circuits on a substrate as apparently contended by the Final Office Action.

Further, the Final Office Action concedes that Karaoguz does not teach either integration of analog and digital portions on a single substrate, nor multiple digital signal processors (DSPs) and central processors. Final Office Action, p. 3. Instead, the Final Office Action purports to rely on Glebov. However, Glebov nowhere teaches or suggests integrating analog and digital circuitry on a *single integrated circuit* (IC) as recited by claim 1. Instead, Glebov merely teaches that a multi-chip module (MCM) may include multiple ICs. Glebov, col. 3, lns. 10-23. Nowhere does Glebov teach or suggest a single IC that includes both analog and digital portions. The further discussion in the Final Office Action of Mok also fails to provide any teaching of analog and digital circuitry on a single integrated circuit, as Mok also only teaches a MCM that includes multiple integrated circuits.

Nor does Glebov teach or suggest a single IC with a reconfigurable processor core, nor such a core having multiple central processors and DSPs as recited by claim 1. Instead, any mention of multiple processors in Glebov is directed to different ICs and even different mainframe computers. Glebov, col. 8, lns. 16-19.

Furthermore, it is improper to combine Karaoguz and Glebov, as there is no motivation to make this combination. In this regard, Karaoguz, which is directed to a wireless communication

device, has no bearing on an optical interconnect for a multi-chip module, as taught by Glebov. Nor is there any teaching or suggestion in either reference of any manner in which the device of Karaoguz could be incorporated into the optical interconnect of Glebov. The mere statement that "it would have been obvious for a person skilled in the art...to integrate said analog and said digital portion on one substrate..." (Final Office Action, p. 4) utterly fails to provide any legally proper motivation to combine the references. *See In re Lee*, 61 U.S.P.Q.2d 1430, 1435 (Fed. Cir. 2001). This is particularly so, as Glebov nowhere teaches the alleged integration on a single integrated circuit as discussed above.

Instead it is clear that the Final Office Action has engaged in the hindsight-based obviousness analysis that has been widely and soundly disfavored by the Federal Circuit. In order to prevent a hindsight-based obviousness analysis, the Federal Circuit requires that "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316-17 (Fed Cir. 2000). No such showing is present here. For these reasons, claim 1 and the claims depending therefrom are patentable over the proposed combination.

Pending dependent claim 7 is further patentable as none of the references teach or suggest a reconfigurable processor core that includes one or more reduced instruction set computer (RISC) processors. Without any teaching or suggestion in the references for this claimed subject matter, claim 7 is patentable for this further reason.

Pending dependent claims 9 and 10 are further patentable, as neither of the references teach or suggest a router that can send packets in parallel through different pathways or primary and secondary communication channels. In this regard, the Final Office Action refers to paragraph 45 of Karaoguz. There Karaoguz teaches connecting only to certain types of networks or choosing between multiple networks. However all this teaches or suggests is sending via one network at a time. Karaoguz, ¶45. Accordingly, neither network selector 64 nor any other portion of Karaoguz teaches or suggests routing packets *in parallel* through different pathways or channels. For this further reason, claims 9 and 10 are patentable over the proposed combination.

Claim 11 is patentable at least for the same reasons discussed above regarding claim 1. Accordingly claim 11 and the claims depending therefrom are patentable over the proposed

combination. For the further reasons discussed above regarding claims 7, 9 and 10, dependent claims 17, 19 and 20 are also patentable over the proposed combination.

Pending claim 21 and its dependent claims are patentable at least for the same reasons discussed above regarding claim 1, as there is no basis for the proposed combination or any teaching or suggestion of a single IC including a cellular radio core, a short-range wireless transceiver core, and a processor core. Dependent claims 22-23 and 29 are patentable for the same reasons above regarding claims 9-10.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,



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